

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/110978 A3

(51) International Patent Classification⁷: **C07C 211/59**,
211/60, 215/16, 229/68, C07D 295/13, A61K 31/04,
31/136, 31/277, 31/4453, A61P 5/26

(74) Agents: **LEVY, David, J. et al.**; GlaxoSmithKline, Five
Moore Drive, PO Box 13398, Research Triangle Park, NC
27709 (US).

(21) International Application Number:
PCT/US2004/018456

(22) International Filing Date: 9 June 2004 (09.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/477,256 10 June 2003 (10.06.2003) US

(71) Applicant (for all designated States except US):
SMITHKLINE BEECHAM CORPORATION
[US/US]; One Franklin Plaza, Philadelphia, PA 19101
(US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CADILLA**,
Rodolfo [ES/US]; GlaxoSmithKline, Five Moore Drive,
PO Box 13398, Research Triangle Park, NC 27709 (US).
LARKIN, Andrew, L. [CA/US]; GlaxoSmithKline, Five
Moore Drive, PO Box 13398, Research Triangle Park,
NC 27709 (US). **STEWART, Eugene, Lee** [US/US];
GlaxoSmithKline, Five Moore Drive, PO Box 13398,
Research Triangle Park, NC 27709 (US). **TRUMP, Ryan**,
Paul [US/US]; GlaxoSmithKline, Five Moore Drive, PO
Box 13398, Research Triangle Park, NC 27709 (US).
TURNBULL, Phillip, Stewart [CA/US]; GlaxoSmithK-
line, Five Moore Drive, PO Box 13398, Research Triangle
Park, NC 27709 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
28 April 2005

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: 1-AMINONAPHTHALENES AS MODULATORS OF ANDROGEN, GLUCOCORTICOID, MINERALOCORTI-
COID AND PROGESTERONE RECEPTORS

(57) Abstract: This invention relates to non-steroidal compounds that are modulators of androgen, glucocorticoid, mineralocorti-
coid, and progesterone receptors, and also to the methods for the making and use of such compounds.

WO 2004/110978 A3